

February 24, 2003

TO: Internal File

THRU: James D. Smith, Senior Reclamation Specialist/Hydrologist/Team Lead

FROM: Jerriann Ernstsens, Biologist
Susan M. White, Senior Reclamation Specialist/Biologist

RE: Mill Fork Lease Permit Extension, Energy West Mining Inc. PacifiCorp, Deer Creek Mine, C/015/018 PM01I-3

SUMMARY:

The Division received an application to extend the Deer Creek Permit area into the Mill Fork Lease. This memo reviews the February 13, 2003 submittal that was determined administratively complete on December 18, 2001.

TECHNICAL ANALYSIS:

GENERAL CONTENTS

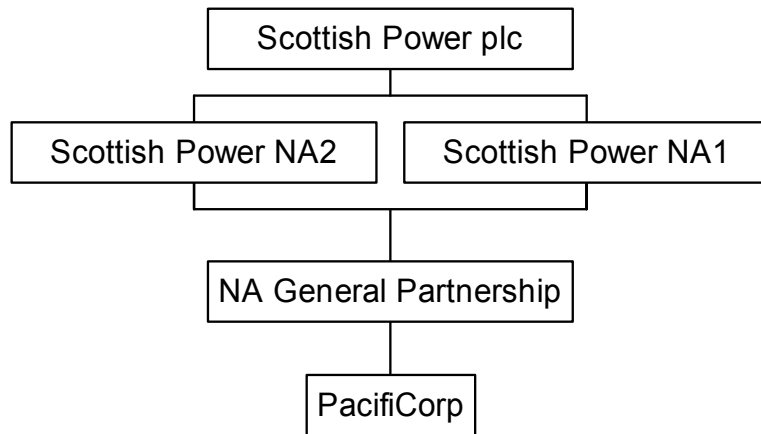
IDENTIFICATION OF INTERESTS

Regulatory Reference: 30 CFR 773.22; 30 CFR 778.13; R645-301-112

Analysis:

The applicant is PacifiCorp, an Oregon corporation. All stock of PacifiCorp is owned by NA General Partnership, a Nevada General Partnership. Scottish Power NA1 Limited and Scottish Power NA2 Limited make up NA General Partnership and Scottish Power plc own both of these identities. Energy West Mining Company, a wholly owned subsidiary of PacifiCorp is the operator. Ownership and control information with names of officers and directors is in Appendix A (list is current as of December 2000). The organization is diagramed below.

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The application gives the name, address and telephone number of the applicant and operator (page 2). The resident agent is identified as Charles Semborski. Employer I.D. Number is 93-0246090 for PacifiCorp and 87-0246090 for Energy West Mining. PacifiCorp will pay the abandoned mine reclamation fee (page 1-2). The names, addresses, permit numbers, regulatory authorities, and MSHA numbers together with dates of issuance for coal mining and reclamation operations owned or controlled by the applicant is found in section R645-301-112.400.

The table titled Deer Creek Mine – Underground Right-of-Entry Information with Cited Surface and Subsurface Ownership lists surface and subsurface owners of record together with the right of entry information. Surface owners and subsurface coal rights are shown on maps MFS1838D and MFU1837D, respectively. Section R645-301-112.600 lists the name and address of each owner of record of all surface and subsurface property contiguous to any part of the permit area.

The only lease interests in the permit area besides coal are oil and gas leases and grazing permits (page 1-21).

After this permit modification is approved but prior to reissuing the permit, the Permittee must update, correct or indicate that no change has occurred in the information previously submitted under R645-301-112.100 through R645-301-112.800.

Findings:

Information provided in the application is not considered adequate to meet the minimum Identification of Interests section of the regulations. Prior to approval, the Permittee must provide the following in accordance with:

R645-301-112.900, After this permit modification is approved but prior to reissuing the permit, the Permittee must update, correct or indicate that no change has occurred

in the information previously submitted under R645-301-112.100 through R645-301-112.800.

VIOLATION INFORMATION

Regulatory Reference: 30 CFR 773.15(b); 30 CFR 773.23; 30 CFR 778.14; R645-300-132; R645-301-113

Analysis:

The NOV information found in Appendix B of Section R645-301-113 Violation Information is up-dated to April 17, 2002.

Findings:

Information provided in the application meets the minimum Violation Information section of the regulations.

RIGHT OF ENTRY

Regulatory Reference: 30 CFR 778.15; R645-301-114

Analysis:

The Forest Service owns the surface lands in the Mill Fork Lease and SITLA is the sub-surface coal owner. The specific right of entry document is State Coal Lease ML 48258, Issued on April 1, 1999 to PacifiCorp (page 1-19). An Environmental Assessment for this lease was prepared by the Manti-La Sal National Forest and the Bureau of Land Management dated, June 1997 and titled, Mill Fork Federal Coal Lease Tract UTU-71307 Environmental Assessment Lease-By-Application No. 11 (EA).

The permit area addition adds 5,563 acres to the existing permit area for a total of 22,621 acres. The table titled Deer Creek Mine – Underground Right-of-Entry Information with Cited Surface and Subsurface Ownership lists the total right-of-entry acres as 22,572.

Findings:

Information provided in the application is considered adequate to meet the minimum Right of Entry section of the regulations. The acreage will be reviewed prior to approval of this significant revision.

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LEGAL DESCRIPTION AND STATUS OF UNSUITABILITY CLAIMS

Regulatory Reference: 30 CFR 778.16; 30 CFR 779.12(a); 30 CFR 779.24(a)(b)(c); R645-300-121.120; R645-301-112.800; R645-300-141; R645-301-115.

Analysis:

Maps MRS1838D and MFU1837D show the new permit area and a legal description is found in Appendix E. A statement is provided that after consultation with state and federal agencies, no lands within or adjacent to the permit area have been identified as qualifying under R645-103-300 as areas unsuitable for surface effects of underground coal mining activities (page 1-22).

Findings:

The information provided in the application meets the minimum Legal Description and Status of Unsuitability Claims requirements of the regulations.

PUBLIC NOTICE AND COMMENT

Regulatory References: 30 CFR 778.21; 30 CFR 773.13; R645-300-120; R645-301-117.200.

Analysis:

Appendix D contains a copy of the proposed public notice. The notice was published in the Emery County Progress for four consecutive weeks, January 1, 2002 to January 22, 2002. The Public Notice contains:

1. Name and business address of applicant
2. Map of permit area
3. Location of where permit application is available for public review
4. Name and address of Division for comments, although no comments from the public were received.

Findings:

Information provided is considered adequate to meet the minimum Public Notice and Comment section of the regulations.

ENVIRONMENTAL RESOURCE INFORMATION

Regulatory Reference: Pub. L 95-87 Sections 507(b), 508(a), and 516(b); 30 CFR 783., et. al.

HISTORIC AND ARCHEOLOGICAL RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.12; R645-301-411.

Analysis:

An historic and archeological resource evaluation was conducted in the Mill Fork area in 1995 by archeological Environmental Research Corporation. A stratified sample or Class II survey was the survey method used. This survey actually sampled 15 percent of the lease area. No significant resources were found. Two nonsignificant prehistoric lithic scatters, no historic and no paleontological resources occur on the lease area. The EA states that the 2 nonsignificant prehistoric sites were found in the Star Point Sandstone and not in the Castlegate Sandstone. The Star Point Sandstone is not likely to be effected by subsidence.

The EA lists several mines and access roads in areas surrounding the lease area developed in the late 1930's and 1940's. The old mines include the Tip Top, Old Leamaster, Johnson, Comfort, Rominger, and Helco Mines. A gas field to the southwest of the lease area was developed in the 1950's. One well lies within the proposed permit area. No evaluation of the historic significance of these mines and gas field is provided in the MRP. No effects of subsidence are expected to occur on these sites.

A letter dated February 8, 2002 from James Dykman, State Historic Preservation Officer, concurs with a determination of No Historic Properties Affected.

Findings:

The information provided in the application meets the minimum Historic and Archeological Resource Information requirements of the regulations.

VEGETATION RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.19; R645-301-320.

Analysis:

The biology section of the application uses resource information taken from the Data Adequacy document and the EA.

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R645-301-300 Biology, section of the MRP describes the diversified topography, complex habitats and vegetation in terms of ecosystems and uses the classifications of conifer ecosystem, aspen ecosystems, transitional ecosystems and pinyon-juniper ecosystems and two vegetation communities which are: mountain brush and sagebrush grasslands. Vegetation types in the Mill Fork Lease area are described on the vegetation map (Drawing #: MFS1821B) as:

Perennial Grasslands (high elevation)

Perennial Grasslands (mid-low elevation)

Perennial forb lands (high-elevations)

Perennial forb (mid to low elevations)

Perennial forb (alpine elevations)

Black sagebrush

Wyoming sage

Big basin sage

Silver sage

Rabbit brush

Mountain brush

Oak brush

Mountain maple

Mountain mahogany

High mountain brush

Manzanita

White fir

Ponderosa pine

Douglas fir forest

Spruce-alpine-fir-forest

Bluespruce

Limber & bristle cone

Aspen snowberry

Aspen sage

Aspen creeping barberry

Aspen mixed conifer

Aspen mixed mountain brush

Pinyon juniper woodlands (likely a mistake since this is identified at 9500 feet elevation)

Utah & Rocky Mountain Juniper

Barren Rock outcrops and ledges

Descriptions of the vegetation in the MRP and the Vegetation Map match.

The MRP describes the transitional ecosystem as various vegetation types that resulted after a fire about 25 years ago. The fire covered a large portion of the Mill Fork area and likely prior to recent man's attempt to control fire this area was in a fire cycle so climax communities have never been defined in the Mill Fork area. The vegetation communities comprising the transitional ecosystems are the predominant communities in this area.

Findings:

The information provided in the application meets the minimum “Vegetation Resource Information” requirements of the regulations.

FISH AND WILDLIFE RESOURCE INFORMATION

Regulatory Reference: 30 CFR 784.21; R645-301-322.

Analysis:

The Mill Fork area contains portions of Crandall Creek and is a watershed for Little Bear, Mill Fork, and Right Fork of Rilda Creek. These are all tributaries to Huntington Creek. The western portion of the area is a watershed to Indian Creek. All of these named creeks contain fish and are important fisheries.

Macroinvertebrate data may be used to determine water quality for fish. The Division in consultation with DWR and USFWS recommends collecting three years of macroinvertebrate baseline data prior to disturbance. The data should be collected one time per year at the same sampling station. The best time of year for sampling is during the summer once immature populations have grown enough for biologist to distinguish among species. Furthermore, sample size should be sufficient enough to reduce mean variation.

Deer Creek mine provides a brief summary of the report - USGS Open-File 81-539. The mine operator plans to use the data in this report for the macroinvertebrate baseline data for the Mill Fork Creek below the confluence of the Left and Right Forks. The report was the result of a collaborative effort among staff from USGS, Utah Department of Natural Resources, and the Division. Data was collected from years 1977 (Oct.), 1978 (July & Oct.), and 1979 (Oct.). From the MRP summary, the results show significant differences between seasons. The macroinvertebrates were at “maximum numbers” for the July sample, but were “not present in any of the October samples” (pg 3-8, 3rd ¶). The Shannon-Weiner diversity index for Crandall and Mill Fork canyons were 2.38 and 2.09, respectively. The Division requests that the mine operator submit the completed report - USGS Open-File 81-539. PacifiCorp has chosen to provide one copy of the report to the Division’s library instead of incorporating the full report into the MRP (see Incoming folder, dated February 13, 2003).

A large portion of the permit area contains deer and elk habitat. Deer and elk are shown to have summer range and high value winter range within the permit area (MFS1849Band MSF1822B). Population numbers and trends of deer and elk herd unit 16B can be derived from DWR annual reports dating from 1998 (www.wildlife.utah.gov/hunting/biggame.html). Herd unit 16B, however, covers an area from about Scofield to Ferron and does not focus on the Mill Fork Lease

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expansion area. DWR cautions to avoid projecting the herd unit 16B population numbers and trends for such a large area to the smaller area of the Mill Fork Lease (LeRoy Mead personal communication, February 25, 2003). The Manti-LaSal National Forest requested that this information be put in the MRP knowing that only regional numbers are available. The intent is to look at trends for the area and the trend for deer is a decreasing population (Rod Player personal communication, February 26, 2003).

A survey for the spotted bat (Forest sensitive species list) and Townsend's big-eared bat was completed in the existing permit area and lease area (Appendix A). Results found no Townsend's big-eared bats. Spotted bats found were solitary and evenly spaced over foraging habitat (lower elevations off the lease area). Roosting sites can be found within lease area and throughout the Huntington drainage in suitable cliffs. The study concludes that by looking at areas that have already been mined cliff failures have not dramatically impacted resident populations. Spotted bats are "common" enough throughout the area that localized cliff failure does not pose a serious threat to the population.

The coal lease is stipulated that SITLA in cooperation with the Forest Service may impose mitigation on the loss of spotted bats. The mitigation may include avoidance during specific times and /or the prevention of bat occupancy during periods of subsidence, such as by netting or screening (Stipulation #20).

A statement is provided in the MRP that no threatened or endangered species of plants or animals inhabit the Mill Fork area (section R645-301-322.210). This statement is based on PacifiCorp conversations with Forest Service Personnel Rod Player and Bob Thompson, qualified Wildlife Biologist and Botanist, and information contained in the Environmental Analysis.

The MRP discusses the potential presence of Monti's milkvetch, Canyon sweetvetch, Peterson catchfly, and Link trail columbine. A query to the Utah Natural Heritage program identified Carrington daisy, Forest Service sensitive species, occurring in the permit area. The MRP describes the potential of this species occurring primarily within the southern region of the mine permit area. Mr. Bob Thompson suggests that there will be no impacts to this species caused from subsidence. The Utah Natural Heritage program identified the Link Canyon columbine and Canyon sweetvetch, Forest Service sensitive species, occurring adjacent to the proposed permit area in Little Bear Canyon. The MRP addresses the potential for occurrence.

Raptor surveys have been conducted along the escarpment zone of the Huntington Creek Drainage. The below table summarizes the data available in the DWR database for surveys conducted in the Mill Fork area.

Table 1. Summary of raptor nest status, location and species from DWR database.

Nest No.	78	1210	1211	1282	963	1206
Species	Golden Eagle	Golden Eagle	Golden Eagle	Redtail Hawk	Golden Eagle	Redtail Hawk
2002	Tended	Active	Inactive	Inactive	Tended	Inactive
2001	Inactive	Tended	Dilapidated	N/A	Inactive	Inactive
2000	Tended	N/A	N/A	N/A	Tended	N/A
1999	Inactive	N/A	N/A	N/A	N/A	N/A
1998	Active	N/A	N/A	N/A	N/A	N/A
Location	Mill Fork Permit Area*	Mill Fork Permit Area	Mill Fork Permit Area	Genwal Permit Area	Huntington #4 Mine Permit Area	Current Deer Creek Permit Area

*For the purposes of this Technical Analysis the proposed Mill Fork extension to the Deer Creek Permit Area is differentiated from the Deer Creek Permit Area recognizing Mill Fork Lease will be a part of the Deer Creek Permit Area.

There are 3 golden eagle nests in the Mill Fork lease area. Two red tail hawk nests and several eagle nests are adjacent to the lease area but not within the subsidence zone. Current mining plans show one coal seam to be mined under nest 1210 in 1211. Currently, no other nests are within the zone of mining.

The DWR raptor survey flight path was viewed for the 2002 data. No flight line was seen on the western side of the lease area along the Joes Valley Fault. The area was flown several years ago and no nests found (phone conversation with Chuck Semborski October 4, 2002). The presubsidence survey map (MFS1839D) shows outcrops in the first long wall panel that could potentially contain raptor habitat. The Division in consultation with DWR and USFWS is requiring this area to be surveyed for raptors prior to longwall mining.

The Raptor Location Map (MFS1852B) provides the location and number of species-specific raptor nests within and adjacent to the Mill Fork lease area. Nest status is available to the Division after the yearly survey is performed.

The mine operator discusses the habitat requirements for the Mexican Spotted Owl (MSO) and provides a summary of research on potential habitat within the permit area and the adjacent lands. Dr. Willey modeled the Mill Fork least tract area for MSO foraging and nesting habitat. Figure 1 (pg 3-12) shows potential nesting and foraging habitat within the permit area and adjacent lands. The mine operator defines the dark green pixels as “potential foraging areas of steep sloped mixed conifers” and the black pixels as “potential nesting habitat” (pg 3-11, 2nd ¶). The operator also summarizes a DWR report that states that most nests in southern Utah are found in caves or cliff ledges in steep-walled canyons (pg 3-11, 2nd ¶).

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Figure 1 (pg 3-12) shows that potential nesting habitat is not within the Mill Fork permit area, but exists north and east of the permit area. This map does not include a distance scale, therefore it is difficult to determine distances between permit area and the modeled nesting habitat sites. Figure 1 also shows discrete parcels of foraging habitat located in the far southwestern corner, and along the mid-eastern and northeastern boundaries of the permit area.

Dr. Frank Howe, DWR, in a meeting with the Division and USFWS discussed the potential for Mexican spotted owl in Utah. Potential habitat was discussed in terms of vegetation, slope, elevation and curvature as follows:

- Vegetation - mixed conifer, P-J, tends towards wooded but not always, fewer but larger trees
- Slope - 60 to 80%, minimum 40%
- Elevation - less than 8000', if greater than 8000' only mixed conifer (Douglas fir mix)
- Curvature - canyons, branches off of main canyons, steep walls, cooler north aspects

One of the concerns of the Division is the level of disturbance from subsidence to foraging and nesting habitat. The MRP addresses the presence or absence of four habitat factors within the permit area as requested by the Division. The mine operator states that there is no potential MSO habitat within the lease area, including the 1.6 acres of potential foraging habitat near the far southwestern corner, that could be impacted by subsidence (Figure 2; pg 3-13). The USFWS reviewed a summary of the Division's memo on the possible effect of mining operations on the MSO. USFWS states that Rod Player supports the Willey-Spotskey model predicting "no potential MSO nesting habitat within the Mill Fork permit area". Furthermore, USFWS supports there "will be negligible impact from mining subsidence to 1.6 of 182 acres of predicted potential foraging habitat within this expansion". USFWS agrees with the Division that because there is no nesting habitat for the MSO and mining operation will be below ground, mining operations are "not likely to adversely affect" the MSO (letter, February 11, 2003).

Findings:

The information provided in the application meets the minimum "Fish and Wildlife Resource Information" section of the regulations.

LAND-USE RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.22; R645-301-411.

Analysis:

The Mill Fork lease area land use is primarily grazing, wildlife and recreation. Other uses in the area are gas production. Currently there is one producing well and plans for future

gas development. A pipeline for the one gas well follows Forest Road 244 off the permit area. Utah Power and light has a ROW for a 345 KV power transmission line and another line for the Genwall, Crandall Canyon Mine. The Flat Canyon road enters and leaves the southwest portion of the permit area.

Findings:

The information provided in the application meets the minimum Land Use Resource Information requirements of the regulations.

MAPS, PLANS, AND CROSS SECTIONS OF RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.24, 783.25; R645-301-323, -301-411, -301-521, -301-622, -301-722, -301-731.

Analysis:

Vegetation Reference Area Maps

Vegetation map, Drawing #: MFS1821D, designates the vegetation types within the Mill Fork Lease and adjacent area. The Manti-La Sal National Forest provided the vegetation mapping.

Findings:

The information provided in the application meets the minimum Maps, Plans, and Cross Sections of Resource Information requirements of the regulations.

OPERATION PLAN

FISH AND WILDLIFE INFORMATION

Regulatory Reference: 30 CFR Sec. 784.21, 817.97; R645-301-322, -301-333, -301-342, -301-358.

Analysis:

Protection and Enhancement Plan

Second mining is expected to occur under the Castlegate Sandstone escarpments on the east side of the permit area. This has caused cliff failure and rock falls in other areas mined in the Deer Creek permit area (section R645-301-525. Subsidence Control Plan). The Pre-Subsidence Survey Map (MFS-1839D) shows the Castlegate Sandstone out crops. Escarpments

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on the Joes Valley side will be protected from subsidence (page 5-24).

The application states (page 3-14) that experience from the existing PacifiCorp permit areas has shown that the effects of subsidence on grazing and grazing lands, timber resources (not identified as a land use) or access to timber resources, and wildlife resources are minimal. Bob Thompson (Forest Botanist, USFS) and Rod Player (USFS) opinions are that subsidence impacts will be negligible to vegetation and wildlife within the Mill Fork Lease (pg 3-19; 4th ¶). The MRP states that infrared color photographs will be used to record vegetation data changes until permit area reduction. When the Division has asked for vegetation information prior to permit area reduction, PacifiCorp has refused to provide such data and again states that their experience indicates no effects. The MRP contains a commitment to continue to analyze vegetation changes every five years using infrared technology. The mine operator will cease analysis once the Division approves a permit area reduction (pg 3-19; 4th ¶). In a letter to the Division (December 4, 2002; RE: Response to the deficiencies to the Mill For Lease Application Round 2...), the mine operator agrees to provide the annual reports on vegetation changes at the time of permit reduction (letter, pg 9).

Endangered and Threatened Species

The only threatened or endangered species possibly present in the permit area is the Mexican spotted owl (although recognized as highly unlikely). The MRP states the potential surface impacts due to second mining have shown land surface disturbance is minimal to non-existent (page 3-9).

The USFWS have identified that water consumption by underground coal mining operations could jeopardize the continued existence of or adversely modify the critical habitat of the Colorado River endangered fish species. The MRP addresses adverse effects to the four Colorado River endangered fish species: the Colorado pikeminnow, the humpback chub, the bonytail chub, and the razorback sucker. Possible effects are addressed by determining the amount of water consumption by the mine. Consumption estimates include evaporation from ventilation; coal preparation; sediment pond evaporation; subsidence effects on springs; alluvial aquifer abstractions into mines; postmining inflow to workings; coal moisture loss; and direct diversions. Mitigation is required if the loss is estimated to be greater than 100 acre-feet per year.

The mine operator provided derivations and values of consumption and addition of water to the Colorado River. The net total is estimated to be a net gain of 2,453 acre-feet. The USFWS reviewed a summary of the Division's memo on the possible effect of mining operations on the Colorado River Basin fishes. USFWS agrees with the Division that because calculations suggest no depletion of water to the Basin will occur, mining operations are "not likely to adversely affect" the endangered fishes of the Colorado River Basin (letter, February 11, 2003).

Bald and Golden Eagles

Page 5-22 of the application states that cliff escarpment failure could occur in section 1 where an eagle nest is located. Mining plans change and a specific protection plan given at this time will likely be obsolete when mining actually occurs. Annual raptor monitoring will continue and prior to mining PacifiCorp will consult with the Division to discuss avoidance, mitigation, and impacts (page 3-7). PacifiCorp should recognize that it is the Division's and not their responsibility to consult with DWR and USFWS.

Findings:

The information provided in the application meets the minimum "Fish and Wildlife Resource Information" section of the regulations.

VEGETATION

Regulatory Reference: R645-301-330, -301-331, -301-332.

Analysis:

Specific information concerning the effects of underground coal mining operations on rare and sensitive plant species if found under the Fish and Wildlife Information section.

In order to mitigate any impacts to vegetation from subsidence the impacts must be located, measured and quantified. Color infrared photographs at five-year intervals will be used as a method to monitor potential vegetation change over time.

Findings:

Information provided in the application is considered adequate to meet the minimum Vegetation section of the regulations.

RECOMMENDATION

The application may be approved in its current form.